



00270

PATENT TRADEMARK OFFICE

SEQUENCE LISTING

<110> Qiu, Yongchang
Wang, Jack
Hewick, Rodney

<120> ACID-LABILE ISOTOPE-CODED EXTRACTANT (ALICE) AND
ITS USE IN QUANTITATIVE MASS SPECTROMETRIC ANALYSIS
OF PROTEIN MIXTURES

<130> GI5412AUSA

<150> 60/242643
<151> 2000-10-23

<160> 16

<170> PatentIn version 3.1

<210> 1
<211> 604
<212> PRT

<213> Bovine Serum Albumin

<400> 1

Met Lys Trp Val Thr Phe Ile Ser Leu Leu Leu Leu Phe Ser Ser Ala
1 5 10 15

Thr Tyr Ser Arg Gly Val Phe Arg Arg Asp Thr His Lys Ser Glu Ile
20 25 30

Ala His Arg Phe Lys Asp Leu Gly Glu Glu His Phe Lys Gly Leu Val
35 40 45

Leu Ile Ala Phe Ser Gln Tyr Leu Gln Gln Cys Pro Phe Asp Glu His
50 55 60

Val Lys Leu Val Asn Glu Leu Thr Glu Phe Ala Lys Thr Cys Val Ala
65 70 75 80

Asp Glu Ser His Ala Gly Cys Glu Lys Ser Leu His Thr Leu Phe Gly
85 90 95

Asp Glu Leu Cys Lys Val Ala Ser Leu Arg Glu Thr Tyr Gly Asp Met
100 105 110

Ala Asp Cys Cys Glu Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu
115 120 125

Ser His Lys Asp Asp Ser Pro Asp Leu Pro Lys Leu Lys Pro Asp Pro
130 135 140

Asn Thr Leu Cys Asp Glu Phe Lys Ala Asp Glu Lys Lys Phe Trp Gly
145 150 155 160

Lys Tyr Leu Tyr Glu Ile Ala Arg Arg His Pro Tyr Phe Tyr Ala Pro
165 170 175

Glu Leu Leu Tyr Tyr Ala Asn Lys Tyr Asn Gly Val Phe Gln Glu Cys
180 185 190

Cys Gln Ala Glu Asp Lys Gly Ala Cys Leu Leu Pro Lys Ile Glu Thr
 195 200 205

Met Arg Glu Lys Val Leu Thr Ser Ser Ala Arg Gln Arg Leu Arg Cys
 210 215 220

Ala Ser Ile Gln Lys Phe Gly Glu Arg Ala Leu Lys Ala Trp Ser Val
 225 230 235 240

Ala Arg Leu Ser Gln Lys Phe Pro Lys Ala Glu Phe Val Glu Val Thr
 245 250 255

Lys Leu Val Thr Asp Leu Thr Lys Val His Lys Glu Cys Cys His Gly
 260 265 270

Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile
 275 280 285

Cys Lys Asn Gln Asp Thr Ile Ser Ser Lys Leu Lys Glu Cys Cys Asp
 290 295 300

Lys Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Lys Asp
 305 310 315 320

Ala Ile Pro Glu Asn Leu Pro Pro Leu Thr Ala Asp Phe Ala Glu Asp
 325 330 335

Lys Val Cys Lys Asn Tyr Gln Glu Ala Lys Asp Ala Phe Leu Gly Ser
 340 345 350

Phe Leu Tyr Glu Tyr Ser Arg Arg His Pro Glu Tyr Ala Val Ser Val
 355 360 365

Leu Leu Arg Leu Ala Lys Glu Tyr Glu Ala Thr Leu Glu Glu Cys Cys
 370 375 380

Ala Lys Asp Asp Pro His Ala Cys Tyr Ser Thr Val Phe Asp Lys Leu
 385 390 395 400

Lys His Leu Val Asp Glu Pro Gln Asn Leu Ile Asp Gln Asn Cys Asp
 405 410 415

Gln Phe Glu Lys Leu Gly Glu Tyr Gly Phe Gln Asn Ala Leu Ile Val
 420 425 430

Arg Tyr Thr Arg Lys Val Pro Gln Val Ser Thr Pro Thr Leu Val Glu
 435 440 445

Val Ser Arg Ser Leu Gly Lys Val Gly Thr Arg Cys Cys Thr Gly Pro
 450 455 460 465

Glu Ser Glu Arg Met Pro Cys Thr Glu Asp Tyr Leu Ser Ile Leu Asn
 465 470 475 480

Arg Leu Cys Val His Glu Lys Thr Pro Val Ser Glu Lys Val Thr Lys
 485 490 495

Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys Phe Ser Ala Leu
 500 505 510

Thr Asp Glu Thr Tyr Val Pro Lys Ala Phe Asp Glu Lys Leu Phe Thr
 515 520 525

Phe His Ala Asp Ile Cys Thr Leu Pro Asp Thr Glu Lys Gln Ile Lys
 530 535 540

Lys Gln Thr Ala Leu Val Glu Leu Leu Lys His Lys Pro Lys Ala Thr
 545 550 555 560

Glu Glu Gln Leu Lys Thr Val Met Glu Asn Phe Val Ala Phe Val Asp
 565 570 575

Lys Cys Cys Ala Ala Asp Asp Lys Glu Ala Cys Phe Ala Val Glu Gly
 580 585 590

Pro Lys Leu Val Val Ser Thr Gln Thr Ala Leu Ala
 595 600

<210> 2

<211> 23

<212> PRT

<213> Peptide from Lysozyme

<400> 2

Asn Leu Cys Asn Ile Pro Cys Ser Ala Leu Leu Ser Ser Asp Ile Thr
 1 5 10 15

Ala Ser Val Asn Cys Ala Lys
 20

<210> 3

<211> 7

<212> PRT

<213> Peptide from alpha-lactoalbumin

<400> 3

Lys Cys Glu Val Phe Arg Glu
 1 5

<210> 4

<211> 25

<212> PRT

<213> Peptide from beta-lactoglobulin

<400> 4

Lys Tyr Leu Leu Phe Cys Met Glu Asn Ser Ala Glu Pro Glu Gln Ser
 1 5 10 15

Leu Val Cys Gln Cys Leu Val Arg Thr
 20 25

<210> 5

<211> 15

<212> PRT

<213> Peptide from beta-lactoglobulin

<400> 5

Arg Leu Ser Phe Asn Pro Thr Gln Leu Glu Glu Gln Cys His Ile
1 5 10 15

<210> 6

<211> 12

<212> PRT

<213> Peptide from Catalase

<400> 6

Arg Leu Cys Glu Asn Ile Ala Gly His Leu Lys Asp
1 5 10

<210> 7

<211> 17

<212> PRT

<213> Protein from catalase

<400> 7

Arg Leu Gly Pro Asn Tyr Leu Gln Ile Pro Val Asn Cys Pro Tyr Arg
1 5 10 15

Ala

<210> 8

<211> 10

<212> PRT

<213> Protein from lysozyme

<400> 8

Arg Cys Glu Leu Ala Ala Ala Met Lys Arg
1 5 10

<210> 9

<211> 12

<212> PRT

<213> Protein from ovalbumin

<400> 9

Ala Ser Met Glu Phe Cys Phe Asp Val Phe Lys Glu
1 5 10

<210> 10

<211> 12

<212> PRT

<213> Peptide from ovalbumin

<400> 10

Arg Ala Asp His Pro Phe Leu Phe Cys Ile Lys His
1 5 10

<210> 11

<211> 14

<212> PRT

<213> Peptide from ovalbumin

<400> 11

Arg Tyr Pro Ile Leu Pro Glu Tyr Leu Gln Cys Val Lys Glu
1 5 10

<210> 12
<211> 21
<212> PRT
<213> Peptide from ribonuclease

<400> 12

Lys His Ile Ile Val Ala Cys Glu Gly Asn Pro Tyr Val Pro Val His
1 5 10 15

Phe Asp Ala Ser Val
20

<210> 13
<211> 24
<212> PRT
<213> Peptide from ribonuclease

<400> 13

Arg Cys Lys Pro Val Asn Thr Phe Val His Glu Ser Leu Ala Asp Val
1 5 10 15

Gln Ala Val Cys Ser Gln Lys Asn
20

<210> 14
<211> 11
<212> PRT
<213> Peptide from ribonuclease

<400> 14

Tyr Ser Thr Met Ser Ile Thr Asp Cys Arg Glu
1 5 10

<210> 15
<211> 15
<212> PRT
<213> Peptide from trypsinogen

<400> 15

Lys Cys Leu Lys Ala Pro Ile Leu Ser Asp Ser Ser Cys Lys Ser
1 5 10 15

<210> 16
<211> 18
<212> PRT
<213> Peptide from trypsinogen

<400> 16

Lys Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Val Val Cys Ser Gly
1 5 10 15

Lys Leu